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AUTHOR Adler, Keith
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ABSTRACT

Noting that debates between theoreticians and practitioners of advertising are as old as the discipline itself, this paper discusses the logics of research for each group in order to identify strategies of research for both practitioners and researchers that will result in a satisfactory explanation of how advertising works. The various sections of the paper discuss (1) the problem of causality that forms the basis of the differences between theory and practice in advertising; (2) the management approach to research, which is based on sufficiency logic; (3) the theoretical approach to research, which is based on explanation; and (4) the requirements for an interactional theory. The paper concludes with recommendations for areas of future research. (FL)

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ADVERTISING DIVISION

EXPLANATORY POWER IN ADVERTISING RESEARCH: DIFFERENCES BETWEEN MANAGEMENT AND THEORETICAL PERSPECTIVES

By

Keith Adler
Michigan State University
East Lansing, Michigan

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Debates between theoreticians and practitioners of advertising are as old as the discipline itself. Theorists would argue for their goal of finding fundamental principles of advertising, which could later be applied to practical advertising problems. Practitioners would suggest that theoretical research is often too abstract to be effectively applied to their specific advertising problems. Yet, representatives from both groups have identified one common problem as the root of difficulty, an incomplete understanding of how advertising works(3,7). This paper will attempt to show how the logics of research for practitioners and theoreticians are different. By doing so, it will identify strategies of research for both practitioners and researchers which will result in more satisfactory explanations of how advertising works.

The Underlying Problem

The phrase, 'understanding how advertising works,' could be stated another way. It could be referred to as a 'knowledge of the causal relationships' in advertising. Once causal relationships were identified, theorists and practitioners could spend their time applying this knowledge to the solution of practical problems. Unfortunately, it doesn't take a third grade empiricist or a 20-year veteran of management to know that the problem of causality is a sticky empirical and philosophical problem. Unfortunately, the problem of causality lies squarely at the root of differences between theory and practice in advertising.

The definitions of 'cause' for advertising theorists and practitioners must differ. This difference is mandated by different goals for research. Quite simply, the manager is attempting to find a solution to an advertising problem, or support for a management decision. The theorist, should be attempting to construct and validate explanations of the advertising process. According to Dodge, one of the primary problems in advertising research has been the wholesale

abandonment of validation research in advertising. He suggested it was easier to, "...put forth ten plausible techniques than it was to validate properly any one of them" (7).

If the assumed definitions of 'cause' for both theorists and practitioners were examined, subtle but important differences would be discovered. In general, practitioners of advertising assume the definition of 'cause' to be as follows: any change in an independent variable that produces a subsequent change in a dependent variable. This oversimplified definition excludes multiple independent variables, because the logic is the same for multiple and individual variables. Remember, this is only an 'assumed definition.' The definition is derived from the objective setting management approach to research, and will be examined later in more detail.

While a theorist might use the same assumed definition of 'cause,' it would be contrary to the goal of explanation for theoretical research. In order to falsify conflicting explanations, the theorist must use the following assumed definition of 'cause': any change in an independent variable which must necessarily precede a change in the dependent variable. For those familiar with terms of conditionship between propositions, the difference between theoreticians and practitioners is quite simple. Practitioners who use research strategies which coincide with management-by-objectives have adopted a sufficiency logic for research. Theorists have adopted, or should adopt, a necessity logic. In order to demonstrate the differences more clearly, a time worn example from philosophy should be reexamined.

What are the necessary conditions for 'fire?' A simple answer might be, oxygen, combustible material, and a match. Indeed, to have a fire, one must have oxygen and combustible material, i.e. these are necessary conditions. But, could not a torch, spark, or lightning produce an equally dramatic fire. The match, torch, spark, and lightning are multiple sufficient conditions. In other words, any of the conditions are sufficient to 'cause' a fire. Whenever

multiple sufficient conditions are present, it means that variable has been conceptualized at a level of abstraction (21) too low for adequate inclusion in a theoretical explanation. As will be seen in later discussions, it also means theoretical propositions about advertising, or any other phenomena, cannot be disproved or falsified. Of course, if a theory can never be subjected to test, then it will never be able to add to the present knowledge base about advertising. What this also suggests is the parameters for a theory of advertising. A theory of advertising will be a set of interrelated propositions whose conclusions follow by necessity (5,13). Further constraints about generality could also be imposed, but will not be at this time.

The differences in logics, necessity versus sufficiency, also suggests an interesting interpretation of difficulties with previous conceptions of consumer behavior, including early economic models (14), the Nicosia (17), Howard and Sheth (12), and Engel, Kollat, and Blackwell models (8). First, through personal introspection, if not through empirical research, it would be possible to show how individuals act on the basis of rational deliberation, impulsiveness, reflection upon group norms at different times in their interactions with advertisers and marketers and their products. Furthermore, since each of the motivations would constitute a sufficient condition for action, the above models and theories would be cast from too low level of abstraction. In order to provide explanatory power, a theory of advertising or consumer behavior must either describe a 'control mechanism' for the different patterns of behavior, or must describe precisely a domain where the model is determinate and predictable. If not, the model will not be falsifiable and will lack practical utility.

For the advertising theorist who would want to construct a theory of advertising, the requirement for necessity would suggest that certain relationships in advertising be included in the theory. These necessary relationships would constitute the major substance of the theory. Conversely, any theory of consumer behavior which did not address the necessary issues of advertising, will not be able to

contribute to either theoretical or practical knowledge about how advertising works. This is not to say unsuccessful attempts to build theory do not have utility as forerunners of more rigorous conceptualizations.

One might be tempted to criticize the practitioner for using a research logic which is counterproductive to theoretical development in advertising. But, this would be a naive conclusion based on biased value judgments about the importance of theory. For the practitioner, the most important research goal is the solution of advertising problems, not the development of theory. However, to the extent advertising theory helps solve practical problems, provision should be made in the research design to check theoretical connections and assumptions. An analysis of both positions will highlight the advantage of using theory in practice and in the extension of present knowledge about advertising.

The Management Approach to Research

Whenever managers use an objective setting approach for research, the research design is based on a sufficiency logic. In other words, what conditions will be sufficient for the attainment of some specified objective. The DuPont approach to research, outlined by Fletcher and Bowers, confirms this logic when it asks, "What decision(s) will be made on the basis of this research?" And, "What are the alternative courses of action?" In identifying alternatives and evaluating the effectiveness of each, the manager adopts the assumed definition of 'cause' outlined earlier. (10)

Consider an advertising researcher who wanted to determine the relative effectiveness of three pieces of copy, A, B, or C. In every piece of copy or design for advertising, there is an implied theory of 'how advertising works.' An emotional piece of copy, or illustrative work, may be presumed to trigger strong emotional responses in the consumer. Long, rational copy may be used to describe a second product. The assumed model of how advertising works presumes rationality

in the consumer, and a model of advertising effectiveness which relies on the contribution of rational arguments to subsequent purchase decisions by this consumer. In every case, whether it is stated or not, the copywriter, layout artist, account executive, and client, make implicit assumptions about how consumers react to advertising. In marketing, Arthur Kover attempted to reconstruct the 'model of man' implied by marketing research. (15) In the same way, it should be possible to reconstruct in part the heuristic theories of how advertising is expected to work by an advertising manager. One might readily question why the reconstruction might be helpful in understanding.

Long run effectiveness in making successful marketing or advertising decisions depends upon perceptive understanding of how consumers react to advertising. When three pieces of copy are tested, as suggested earlier, the immediate question for research would be, "Which piece of copy was most effective in persuading the consumer?" A more beneficial question for a corporate manager would be, "Why did copy A stimulate more response than copy B or C?" By adding a set of variables to the copy measurements which reference the implied theory, an advertising manager could acquire inductive support for the implicit theory. If a piece of advertising copy was designed to change cognitions or knowledge about the product in order to stimulate sales, a set of questions which weight affective and conative dimensions relative to the cognitive dimension might be important. If the measurement of affective and conative dimensions proved more reliable as indicators of purchase behavior, then support for advertising copy which was oriented toward cognitions would be called into question.

Even with the addition of variable sets which are connected to theory, the advertising researcher cannot rule out alternative theories about the effects of advertising on consumers. As long as multiple sufficient 'causes,' or conditions, are possible it is impossible to evaluate a single explanation of how advertising works. Instead, the conclusions to be made from research with sufficient conditions

will be relative in nature. Copy A can be considered more effective than Copy B, but no statement about why the relationship holds can be made from this type of research. At the same time, one might question the effect of the problems of multiple 'causation' on the experimental design chosen by an advertising manager, or researcher.

Categorizing experimental designs by three common types, survey, laboratory, and field experiment, makes it possible to show how the advantages of each design are related to the problem of multiple 'causation.' Survey designs typically measure covariation between independent and dependent variables. Since no attempt is made to manipulate the independent variable, it is impossible to say a specific independent variable is a sufficient condition for the dependent variable. In other words, a statement of causation, even in the assumed sense stated earlier, cannot be made because the researcher has not introduced the independent variable.

In laboratory situations, the experimenter has the ability to control conditions, and to introduce the independent variable systematically. But, what does controlling the conditions imply. Most researchers would say this control isolates the relationship between experimental independent variable and the dependent variable. In most careful experiments it does. Unfortunately, when multiple sufficient conditions are possible, it eliminates these other possible causes from the laboratory situation. Therefore, while an experimenter may define causation as the sufficiency of a variable in bringing about change in the dependent variable, no effective magnitude of the relationship can be measured. It is precisely because of this fact that variables thought to be important in the laboratory situation often explain less than three percent of the total variance in the dependent variable when taken into a field testing situation. The laboratory situation has made it impossible to determine the relationship between one multiple 'cause,' and a host of others.

Field experiments, as described by Haskins (11) and Boyd, Westfall, and Stasch (4), have been extolled for their ability to capitalize on the advantages of surveys and laboratory experiments. When compared to these two designs, field experiments add some measure of control to the research setting, usually through more systematic application of the independent variable. Because they are performed in a natural setting, field experiments are able to measure the effect of the experimental independent variable *in the presence of other multiple 'causes' of change in the dependent variable.* The field setting provides an index of the magnitude of the experimental independent variable, as long as the independent effect upon the dependent variable can be ascertained. Of course, separating the effects of the multiple causes cannot be done. That is why experimental situations with multiple 'causes' result in indeterminacy, and an inability to test explanations about how advertising works. This doesn't mean field experiments are not valuable. It means the results, like any research including multiple 'causes,' will be highly situation specific. Why? Because determinacy in the relationship between the independent and dependent variable is affected by the presence of other causes.

An unsophisticated empiricist might suggest including the multiple causes in a multiple regression equation, in order to grind out a solution to the problem. But, multiple regression is a linear combination of combined effects, rather than independent 'causes.' Remember, this is the simplified case. It is also possible to have sets of variables that are sufficient for another dependent variable. The bottom line for an advertising theorist is, any empirical study based on sufficiency relationships cannot provide explanatory power for an understanding of the advertising processes. For the advertising manager, research which includes troubling multiple 'causes' is not so bleak.

Most advertising managers are interested in answering very specific campaign questions, for a specific product, in an identifiable environment. The specificity available in field experiments usually provides adequate estimates of the magnitude

of effect for experimental variables relative to other important factors in the test environment. By introducing measures which are connected to theory, the manager will be able to make evaluations of important assumptions about how advertising works. Application of theory in the marketplace will also provide insight into the predictive capability of a theory; but will not allow satisfactory tests of alternative explanations for advertising theories. The development of sound, substantiated theory demands more scientific rigor.

The Theoretical Approach to Research

The primary purpose of theory is explanation (13). While some authors, like Zaltman, Pinson, and Angelmar (23), argue for prediction as a primary goal for explanation, the deficiency of this belief is evident from the previous discussion about sufficient conditions. If prediction was the primary goal, then it would be impossible to determine which of several multiple 'causes' were indeed the primary component of a theory, in terms of its predictive efficiency. Before examining the requirements for a theory about how advertising works, it would be helpful to take a broader look at what advertising researchers would like to explain.

Four levels of explanation could easily be identified. First, an advertising researcher might attempt to explain the behavior of a consumer based on internal factors within an individual consumer. Theory at this intrapersonal level would require correlations of internal structural variables, like the information processing factors described by Bettman (2), with effect variables. The unit of study for the researcher would be an individual consumer; and, the variables would be internal to the consumer.

A second level of explanation, which could be called an interactional level, might attempt to describe the interaction of consumers with their environment. Explanations of this type may be the most typical when the phrase, "explain how advertising works," is used. Theories at this level would focus on the behavior

of consumers and their interactions with each other. But, in order to provide a full and adequate explanation at the interactional level, the theory must include an implicit or explicit assumption about intrapersonal variables and their interrelationships. In other words, if a researcher wanted to explain how advertising works AND include personal influence variables, some descriptions about how an individual consumer processes information should be made. If these descriptions or assumptions are not made public, then their validity cannot be validated.

To the extent that researchers would want to explain how firms are related to the advertising process, an organizational level of explanation could be identified. In order to make such explanations, variables must be cast at the organizational level. Yet, like the other levels of explanation, certain assumptions about the consumer and advertising must be made. These assumptions should also be made public, in order to facilitate validation. Theories of advertising at this level might attempt to explain advertising regularities inside a single firm, as does the Nicosia model (17). Including the firm in his model, Nicosia attempted to explain the behavior of the firm in connection with his descriptive model of consumer behavior. On the other hand, a theoretical researcher may try to describe the interaction between firms in the marketplace, as does Alderson (1,9). Both Nicosia and Alderson used a different type of theoretical explanation, which will not be discussed. It will not be discussed, because the theory construction techniques are typical of functional explanations in sociology. It is adequate to say that functional explanations attempt to explain systems of variables, and must be evaluated on the basis of their consistency with functional explanation. Budgeting and allocation theories almost certainly are of this type. Examples of these theories can be examined in the mathematical work of Rao (19).

An explanation at the societal level would attempt to relate variables of advertising to important societal variables, like norms, aggregate patterns of behavior, etc. The institutional and personal assumptions would be implicit

and must be made explicit for validation. This is perhaps the most general type of advertising explanation possible. It is probably the most complicated because of its complexity. In this hierarchy of explanation, the levels only suggest a specific focus for theories. To be practically applicable, theories must delimit themselves. If a theory attempts to explain everything it becomes useless (23). In common English, what each level explains is as follows: (1) Intrapersonal theories explain what's going on inside the consumer and how it affects an individual's behavior. (2) Interactional theories explain 'how advertising works' relative to consumer behavior, in general. (3) Organizational theories explain the relationship of a firm to advertising success, or the relationship between firms and the marketplace. (4) Societal theories of advertising explain the interrelationship between advertising and its social effects. Logically, this level would be extremely important for public policy decisions. Interactional and organizational levels would also be important. The hierarchy described is heuristic. Its only purpose is to organize different types of advertising theories, based on the types of explanation attempted. In order to understand the theory building requirements more adequately, one level of this hierarchy will be examined more closely.

Requirements for an Interactional Theory

Cushman (5), and many others have indicated that a theory must be a <u>set of propositions</u> which express <u>general</u> AND <u>necessary</u> relationships. The generality requirement provides cross-situational consistency. The necessity requirement allows falsification of a theory, therefore alternative explanations can be evaluated. An illustration of the problem in building a theory, without necessary relationships is the now famous, Lavidge and Steiner "Hierarchy of Effects Model of Advertising Effectiveness."(16)

In fairness to Lavidge and Steiner, some qualification of this criticism is in order. The hierarchical model of measuring advertising effectiveness was not designed to be a theory about 'how advertising works.' Instead, it was really an evaluation model for the measurement of campaign effectiveness using intermediate communication variables. One might quickly add, however, that many writers of introductory textbooks in advertising imply that the hierarchy is really how advertising achieves its effect. In addition, this paper will not attempt to distinguish between models and theories, even though the distinction may or may not be trivial. The important focus for examining the Lavidge and Steiner model is its logic. As conceptualized, the model was a sufficiency model, like those described in the earlier section. Sufficiency status for the elements of the model could be argued from several different directions. Yet, this is not to say Lavidge and Steiner believed it to be a sufficiency model.

The most conclusive argument about the sufficiency, rather than necessity, logic in the model was made by Michael Ray (20). In his discussion of the hierarchy of effects, he provided evidence for two other sequences of attitude and behavior change, called the 'dissonance-attribution' and 'low involvement' hierarchies. In other words, he provided evidence for two other sequences of relationship between the Lavidge and Steiner variables. Several other possibilities were also questioned. As noted earlier, whenever multiple sufficient conditions are present, the researcher has two alternatives. The model can be reconceptualized at a higher level of abstraction which incorporates the multiple conditions, or the researcher may attempt to specify the exact conditions when each of the hierarchies are operative. Because of the multiple sequences, tests of explanation would be impossible. Further empirical evidence of problems in the hierarchical model were discussed by Palda (18). As a final metatheoretical note, complications in the falsification of the Lavidge and Steiner model could also occur because of increased empirical and theoretical problems in constructing

and testing hierarchical, or developmental, theories. The importance of necessary relationships for theory testing cannot be overemphasized. More important, is the identification of the necessary relationships which must be outlined in order to construct a theory of advertising, at the interactional level.

In order to be tested, any theory of advertising must describe and specify three necessary relationships. The relationships are as follows: (1) the relationship between media variables and exposure to advertising; (2) how attention is related to message impact; and, (3) how messages are related to behavior. If a theoretical explanation did not include (1) or (2), then the theory would be of no value to the media or copy strategist. If it didn't include (3), then there would be no way to falsify and test the effect of advertising on behavior, or the advertising theory.

Before examining each of the three relationships independently, a short illustration of the importance of these relationships should be sketched. During the 1960's, comprehensive behavioral models were constructed by Nicosia (17), Howard and Sheth (12), and Engel, Kollat, Blackwell (8). A review of the models by an advertising researcher could easily provide evidence for the following argument. Because none of the models described any of the three relationships above, the models were essentially useless for an advertising practitioner. This argument would be applicable, whether or not, each of the models received empirical support from other researchers. But, this is only one of the implications of the explanatory power of the three relationships described above.

Without being exposed to an advertising message, the consumer could not be affected by advertising. This simple truism hides the complexity of the exposure mechanism. Undoubtedly, the researcher would have to take a stand, or at least wrestle with the concept of selective exposure. The theorist, in order to construct a more complete theory, might also have to posit mechanisms for the transmission of messages through interpersonal networks. Variables necessary for

maximum exposure would also have to be outlined, and specified clearly. The relationship between attention and message impact would also be complicated by similar factors.

The issue of selective attention mirrors the complexity of selective exposure. Admittedly, the issue of 'message impact' is a broad conceptualization, which must be addressed. What do we mean by impact? Does it mean the message was registered in the mind of the consumer, consciously or unconsciously? It must also decipher relationships between visual and verbal messages, and the meaning of 'attention' itself. But, most important for the practitioner's use of theory is the search for necessary variables which lead to increased attention to advertising.

Specification of how messages affect behavior has not been an uncomplicated task to date. Myriads of attitude researchers have attempted to outline attitudinal mechanisms for this influence process. Some of the theoretical problems have been outlined in the work by Cushman (6). The explanation of message effect on behavior could be further complicated if messages have different effects on behavior at different times, or in different situations.

To make a complicated situation more complicated, the three necessary relationships for advertising theory only describe a static model of advertising. If, as should be the case, the theorist wants to construct a dynamic model or theory of advertising, time must be considered and incorporated into the explanations. For media strategists, time implies frequency effects. For links to attention, time has important implications for processing messages. And, for the link between messages and behavior, time is connected to accumulated effect of messages.

After studying the complexities and requirements for building an advertising theory, one might ask, "Why go to all the trouble? Is the payoff that good?" The answer is, if an advertiser wants to systematically increase efficiency, there is no better way than to understand the advertising process. Understanding can only arise from tested explanations; and explanation is the purpose of theory.

Conclusion

In summary, important differences have been shown between management oriented research and theoretical research in advertising. Management research is based on sufficiency logic, and could be improved by understanding and testing the assumptions behind the problems studied. Management applications of theory can prove valuable for the honing of predictive ability in theory. But, the sufficiency logic of management research does not allow falsification of explanations.

Like a scientist, advertising researchers would like to be able to explain, predict, and control the advertising processes. Explanations can only be derived from theory; and tested explanations offer the most precise method of control. Theory is not necessary for prediction, but prediction must be a part of any theory of advertising since prediction is what allows theory testing.

In a recent article, Vaughn (22) attempted to synthesize a new planning model of advertising in order to explain 'how advertising works.' This recent article underscores the importance of theory. He suggested that advertising has traversed through several eras, including the traditional advertising theories of the 50's, the consumer behavior models of the 60's, the high/low involvement models, to his new model, the 'FCB Model.' Unfortunately, his 'FCB Model' doesn't provide any more insight into explanations of 'how advertising works,' than any of its predecessors. It is not sufficient to be able to describe whether a product is low involvement or high involvement in order to explain advertising. Instead, it is important to be able to predict when a product will be low or high involving, based on some mechanism or theory of advertising. Vaughn has only offered a typology, not an explanation.

In terms of future research, what would seem to be the most likely area for successful understanding of the advertising process, at the interactional level? Certainly, the biggest payoff would come from an explanation of the 'control mechanism' which determines when specific patterns of behavior are operative. If behavior is situational exclusively, then the researcher must attempt to specify

the situational parameters where advertising regularities occur. Through explanation or specification of these parameters, more accurate predictions of consumer behavior relative to advertising messages would be expected.

One must understand the relationship of theoretical research to other types of advertising research in order to affix proper perspective to it. In general, there is much more descriptive and exploratory research in advertising that is performed each year, whether it is in industry or academic settings. Without discovering a regularity between media, message, or behavior, there can be no theory. So, descriptive and exploratory research must be continued. However, an explanation of the advertising process can only be verified when these new regularities and variables are connected to the necessary relationships mentioned in this paper.

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